

NOTES ON MALUS LANCIFOLIA REHDER

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In my monograph on the above species, which was described in Volume II of C. S. Sargent's "Trees and Shrubs" (1907-13), in PHYTOLOGIA 9:108.1963 I portrayed its characters and I condemned M. L. Fernald's misguided effort in describing it as a variety of coronaria.

In my "Dendrologic Comments on Steyermark's 'Flora of Missouri'" in PHYTOLOGIA 12:1.1965 I mentioned trees of lancifolia that I had recently found in Clay County, Missouri; and I stated that the color of the anthers of lancifolia was deep pink or reddish pink and the color of the anthers of coronaria and ioensis was orange yellow--not red for both as stated by Steyermark. Regarding the shape of the leaves, there was confusion in herbaria because B. F. Bush distributed specimens of lancifolia from the type locality under the name of coronaria for years before lancifolia was described.

On 30 Sep. 1967 I revisited Rudolph Schmidt's farm in Kansas City North in Clay County and I found a new AFA champion Lanceleaf Crab Apple with a circumference of 3 feet 5 inches and a height of 29 feet.

Mr. Schmidt also has the AFA champions Prairie Crab Apple and Wildgoose Plum. Immediately south of his property in Gladstone is a relict colony of Sugar Maples, which contains the largest Sugar Maple in Missouri.

The Clay County Park and Recreation Commission was set up a few years ago to establish a county park system. A proposal for the commission to acquire this and two other tracts in the county was disapproved by the voters last October. There is local sentiment in favor of preserving Schmidt's trees and the Sugar Maples and it is hoped that they will be saved from residential construction produced by the growing population of Kansas City with attendant taxes.

All three species of Crab Apples are found in scattered colonies in the Indiana Dunes State Park at Tremont, Porter County, Indiana. One colony is on the south side of No. 10 trail west of its junction with No. 2. Appropriately enough, the trees on the west side of this colony are the Western species ioensis and the trees on the east side are the Eastern species coronaria. Both these species have irregular exfoliating strips of bark.

There is a colony of coronaria on the south side of No. 2 trail about 350 yards west of the point where it turns north into The Marsh.

At a place on the south side of No. 2 trail about

220 yards west of this turn there is a colony of Crab Apples that I thought for a long time were Sweet Crab Apples. I should have known better because the bark was regularly ridged and the trees were tall and straight. On 20 May 1963 I found a sapling that had been pulled down. I examined its flowers and found that the anthers were deep pink. After studying all the characters of this tree and nearby trees I found that all the trees in this colony were indeed lancifolia. The trees were typical of the species except for the venation of some of the leaves.

The leaf in the upper right corner on p. 112, Vol. 9, was taken from the largest tree in this colony of lancifolia, which died in the winter of 1966-7. I misidentified this one leaf as coronaria in the article.

This is the first time that I have found lancifolia east of Jackson and Clay Counties of Missouri.

The following page shows a revised Key to lancifolia and coronaria. I still regard the color of the anthers as the most important diagnostic character, as indicated by the weight, 8. It is of course necessary to see the newly opened flowers. I have added the bark as a character, which is quite distinctive and readily recognized.

There is no doubt that lancifolia is a distinct species and not a variety.

REVISED KEY TO MALUS LANCIFOLIA AND MALUS CORONARIA SHOWING
THEIR DIFFERENCES

WEIGHT	CHARACTER	MALUS LANCIFOLIA	MALUS CORONARIA
6	Bark	Fissured into thin narrow vertical plates, not exfoliating	Dark gray, thin, irregular vertical exfoliating strips.
4	Leaf	Rounded, often semicircular.	Often broadly rectangular-cuneate or nearly so above the narrowly rounded or subcordate base.
	Blades: Base		
1	Loba- tion	Typically unlobed except for 1 pair of lobes 1-2(-4) mm wide (mesured horizontally but not always present) at the distal end of the rounded base; or sometimes scarcely lobulate.	4-7 pairs of rectangular, pointed, toothed lobes or lobules, the lowest pair usually the largest and appearing at three-eighths to one-half the distance from the base to the apex on lobed leaves.
7	Dimen- sions	Averaging 49% to 60% as wide as long.	Two-thirds to four-fifths as wide as long.
1	Color above	Moderate yellow green or olive green.	Dark greenish yellow or dark yellow.
5	Primary veins	Sometimes arcuate, leaving the midrib at irregular intervals and nearly buried in the parenchyma, usually forking and not reaching the margin of the leaf.	Straight, leaving the midrib at regular intervals and extending to the points of the lobes.
2	Flowers	31-46 mm wide, blooming 6 days later than coronaria.	30-40 mm wide.
8	Anthers	Deep pink or reddish pink.	Orange yellow.
3	Pubes- cence of lower side of sepals	Glabrous.	Pubescent or hoary-tomentose.
1	Pome	21-28 mm high, 25-36 mm wide.	20-25 mm high, 26-32 mm wide.